Modeling continuous improvement evolution in the service sector: A comparative case study

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Abstract

This paper focuses on how service-based organisations establish and sustain incremental performance improvement. A review of existing continuous improvement (CI) evolution theory provides a model for comparison with the observations from the case study organisation. The research employs a longitudinal, embedded case study, involving two units of analysis and multiple research cycles. The use of narrative enquiry provides a means of understanding the evolution of CI over almost a decade of activity. It allows the testing of Bessant et al's (2001) Maturity Model against real world situations, specifically in the service sector, via comparison of the impact of differing approaches, actions, obstacles and achievements within the two units of analysis, all the while operating under the umbrella of a common organisation that was evolving in reaction to market challenges.

Key words: Continuous Improvement, Maturity, Evolution, Service Sector, Behaviour, Value.

Introduction

Through the past three decades, organisations have faced unparalleled challenges in dealing with increasing complexity and turbulence in their operating environments. Private sector organisations exist within an ever-changing and challenging economic climate; striving to maintain and improve their position, yet facing a constant fight for survival. Much alike the Queen of Hearts' message to Alice in Lewis Carroll's (1863/1984) 'Alice in Wonderland' it is no longer possible for an organisation to stand still and remain competitive, *'we must run as fast as we can, just to stay in place, and if you wish to go anywhere you must run twice as fast as that'.*

For those organisations with a willingness to reflect and evolve, the established principles of quality management continue to serve as a path for economic survival and growth. Continuous improvement (CI) is frequently cited as being integral to many quality initiatives (Berger, 1996; Bhuiyan & Baghel, 2005; Sahin, 2000) that allow an organisation to identify and implement improvements on an on-going basis (McLean et al. 2015). Whilst radical and ad-hoc improvements are beneficial, the importance of CI in improving products, services and processes is widely recognised (Bhuiyan & Baghel., 2005; Sahin, 2000), moving

beyond change for change's sake, to focusing on change that makes a meaningful contribution. CI is a comprehensive and systematic methodology, described by Swinehart et al. (2000) as the ultimate test of a world-class organisation. Once it has matured to an advanced state, CI embeds a culture of organisational learning, in which new knowledge is created, acquired, and applied (Martinez-Costa & Jimenez-Jimenez, 2008; Bessant et al., 2001), offering the opportunity to shape new capabilities and build competitive advantage.

CI aims to identify opportunities for improvement and enhance the level of organisational performance by continually reviewing processes to incorporate sustainable small step improvements via the active participation of people (Anand et al., 2009; Berger, 1997). Such innovation should be considered as a fundamental strategic line (Bessant et al., 2001) and key to the fulfilment of strategic goals (Audretsch et al., 2011).

Numerous organisations have embraced CI enthusiastically (Bernett & Nentl, 2010), with the objective of establishing a culture of sustained improvement (Delgado et al., 2012) and a desire to achieve competitive excellence (Caffyn, 1999; Gallagher et al., 1997). However, the failure rate is high (Bessant et al.; 1994 & 2001) with the majority of CI initiatives reported to end in failure or abandonment for a variety of reasons that may be grouped into to eight central themes (Mclean et al. 2015) (shown in Figure 1). Mendelbaum (2006) reports that just 11% of organisations consider their CI initiatives to be successful, a challenging rather than simple task (Pullin, 2005) and for most *'a struggle rather than a smooth process'* (Rijinders & Boer, 2004, p. 295). Whilst initially a CI programme may seem successful, it can soon become problematic to keep up the momentum in the long run (Brennan, 1991). The true challenge is in how organisations can truly sustain a CI system in the longer term (Bhuiyan, et al. 2006) and demonstrate value added. Yet these reports fail to take into account changes in organisational DNA, employee behaviour, developments in skills and abilities, and understanding of improvement techniques that arise at least in part due to the CI programme.

Establishing an environment rich in CI requires an environment that embodies encouragement, participation and inclusivity (Bessant et al., 1994), with a shift from mechanical to organic structures (Lindberg & Berger, 1997) and cultures that are supportive of ongoing change (Varona & Ravasi, 2003; Fryer et al., 2007). Achieving such an

environment typically requires a shift in culture that must be led by changes in management behaviours to build confidence in staff to empower and engage them in improvement activities (Bhuiyan & Baghel, 2005; Gallagher et al., 1997).

Figure 1: Themes of CI Failure

Source: Adapted from McLean, Antony and Dahlgaard, 2015

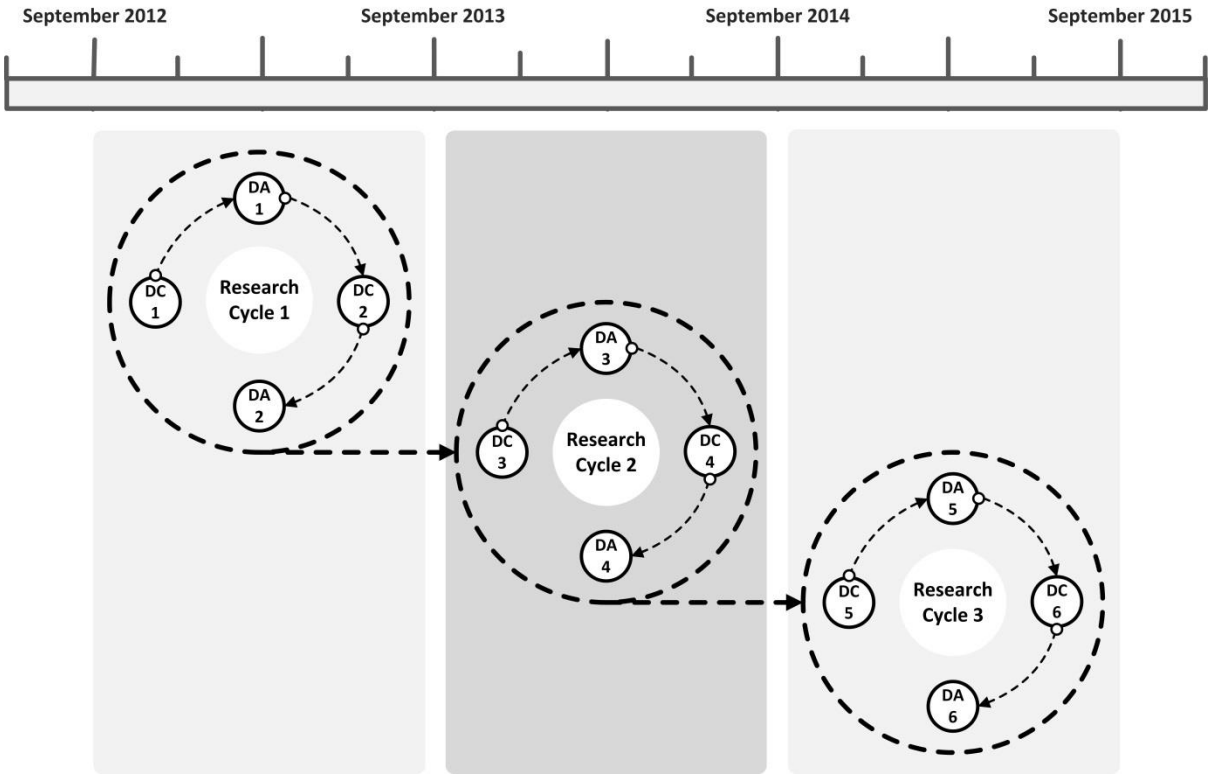
Methodology

The study uses multi-qualitative methods to build upon current knowledge and construct an in-depth understanding of the research context (Yin, 2009). The paper examines how CI evolves in reality, seeking insight from the varied and shifting perspectives of employees within the case organisations. The multiple embedded case study approach allows for an in-depth exploration, and extensive comparison of the similarities and differences of two units of analysis (Case 1 & 2). Each case is presented as a narrative (Tsoukas, 1989) and subsequently compared developmentally to the Bessant et al. (2001) CI Maturity Model (Table I & II), and expressed as vector diagrams (figure 6).

The empirical data was collected longitudinally over three research cycles (Figure 2), between September 2012 and September 2015. Each cycle included two data collection (DC) points, each lasting between two and five days, and data analysis (DA) points. This stimulated a parallel literature review evolving over the duration. Research

Cycle 1 explored the CI launch with; two rounds of interviews, the opportunity to observe CI initiatives in place; and review of in-house documentation (DC 1&2). Research cycles 2 (DC 3&4) and 3 (DC 5&6) explored Case CI progress, using two further rounds of interviews with existing and additional participants, further observation of CI initiatives, and document analysis. There were 76 interviews in total, with participants who were either self-selected volunteers of non- or middle management, plus targeted senior managers and CI specialists, who were purposively selected for their knowledge, experience and leadership (Saunders et al., 2012).

Figure 2: Research Cycles



Source: Author

Thematic data analysis (Figure 2 -DA) followed each period of data collection. In order to test the Bessant et al. (2001) CI Maturity Model (Table II) and map the analysis accurately; its constituent behaviours were utilised as 'Codes' and the abilities as 'Themes' (Braun & Clarke, 2008) (Appendix 1) . The extensive data set was systematically analysed, collating data relevant for each code across 3 Phases of CI implementation Phase 1 (2008 – 2012),

Phase 2 (2012 – 2014), Phase 3 (2016 – 2016) (see Figures 4&5) . To ensure validity and reliability, and an accurate representation of the finding a three lens approach was utilised.

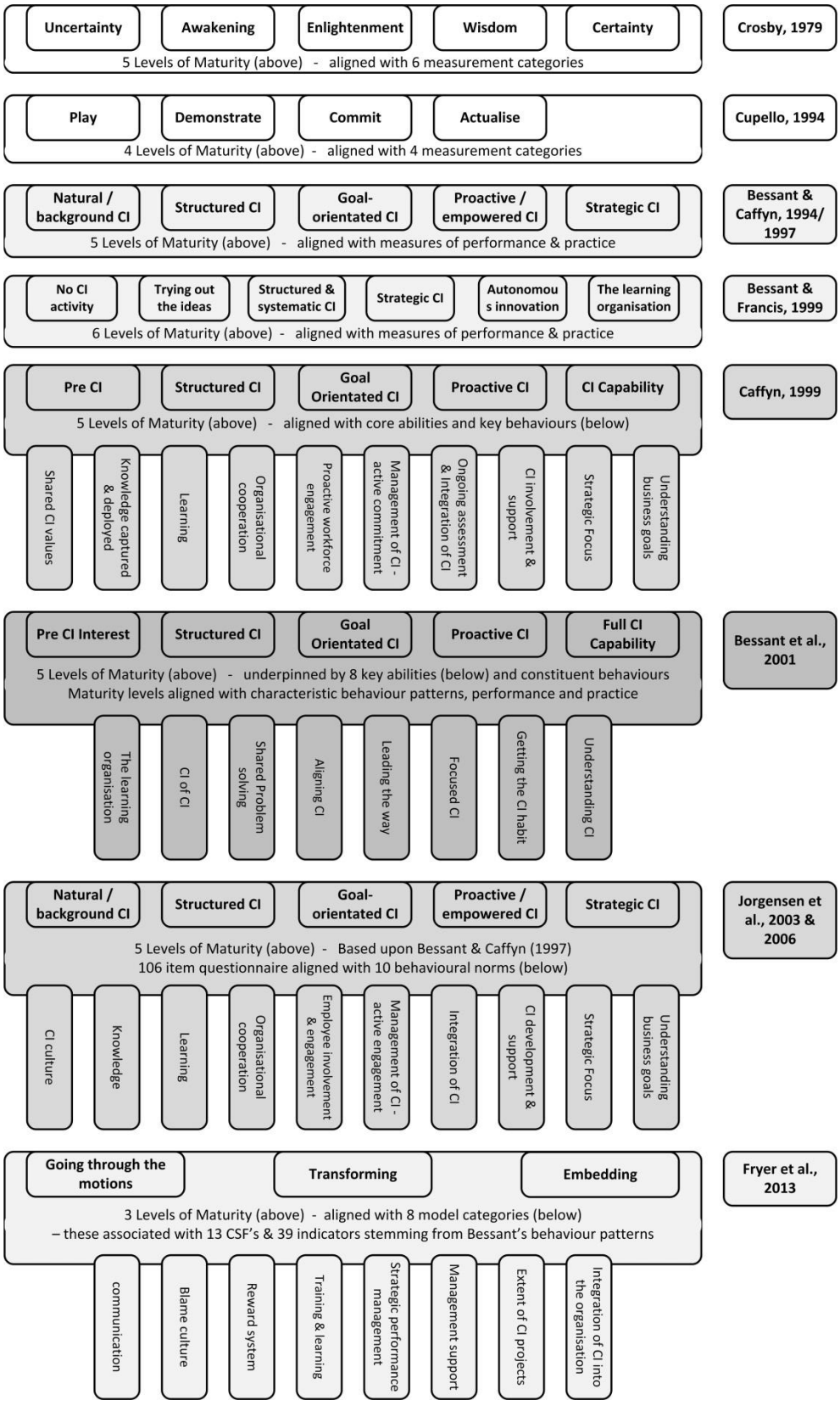
- The research was triangulated using multiple methods: semi structured interviews, focus groups, observation and document analysis;
- The participants, through member checking and respondent validation (Silverman, 2011);
- Externally, through peer review, and the allocation and interpretation of data to codes and themes corroborated by an independent researcher.

Reflections upon the Evolution of CI Theory

The keys to sustaining CI lie not only in effective implementation, but also in ensuring progress is measured, value is established and integrating CI into the organisation's 'business as usual' mindset. These are not new messages, but were explored, for example, by Crosby (1979) and Parasuraman et al. (1985). Crosby (1979) sought to evaluate the extent of an organisation's approach to quality management through a maturity grid; applying five stages of evolution (see Figure 3). Subsequently, Cupello (1994) offered a new paradigm combining four new levels of maturity.

Figure 3 maps the evolution of CI maturity modelling; identifying the progression of maturity levels and characteristic behaviours. Bessant et al. (1994) identified five critical factors, providing a platform for identification of the main organisational abilities perquisite to the successful implementation of CI. The organisational ability (capacity to adopt a particular approach for CI); constitutive behaviours and routines (established by employees which reinforce the CI approach); and facilitators (procedures and techniques used to improve CI efforts), representing the CI patterns that should be present. Bessant & Francis (1999) built upon previous work about strategic CI capability, focusing on the relationship between the acquisition and integration of key behaviours, and corresponding advancement in practice and performance. Notwithstanding some linguistic differences, the Bessant & Francis (1999) evolutionary model and associated behaviours are clearly reflected within Caffyn's (1999) CIRCA (Continuous Improvement Research for Competitive Advantage) CI Self-Assessment Tool.

Figure 3: Evolution of CI Maturity Modelling



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Bessant et al.'s (2001) model aligns previous research within a framework consisting of five levels of CI maturity and eight classes (A-H) of CI abilities and behaviours. These are detailed in Tables I and II. The model provides a roadmap for the journey towards CI maturity and capability, where progression from one stage to the next is achieved through a process of learning, practicing, and mastering the associated behaviours, routines and abilities. In essence, the later levels of evolution mirror the journey towards Senge's (1990) learning organisation.

Table I: CI Maturity Levels & Behaviour Patterns

CI Level		Characteristic Behaviour Patterns
1. Pre CI Interest	Interest in the topic has been triggered – but implementation is on an ad hoc basis	Problems are solved randomly; no formal efforts or structure form improving the organisation; occasional bursts of improvement punctuated by inactivity and non-participation. Solutions tend to realise short-term benefits; no strategic impact on human resources, finance or other measurable targets; staff and management are unaware of CI as a process.
2. Structured CI	There is formal commitment to building a system which will develop CI across the organisation	CI or an equivalent organisation improvement initiative has been introduced; staff use structured problem solving processes; a high proportion of staff participate in CI activities; staff have been trained in basic CI tools; structured idea management system is in place; recognition systems have been introduced; CI activities have not been integrated into day to day operations.
3. Goal Orientated CI	There is commitment to linking CI behaviour, established at a local level to the wider strategic concerns of the organisation	All of the above plus: formal deployment of strategic goals; monitoring and measuring of CI against these goals; CI activities are part of the main business activities; focus includes cross-boundary and even cross enterprise problem solving.
4. Proactive CI	There is an attempt to devolve autonomy and to empower individuals and groups to manage and direct their own processes	All of the above plus: CI responsibilities devolved to problem solving unit; high levels of experimentation.
5. Full CI Capability	Approximates to a model of the learning organisation	All of the above plus: extensive and widely distributed learning behaviour systematic in finding and solving problems and capture and sharing of learning; widespread, autonomous but controlled experimentation.

Source: Adapted from Bessant et al. 2001

Table II: CI Abilities (Themes) & Constituent Behaviours (Codes)

CI Abilities	CI Constituent Behaviours
A **Understanding CI** The ability to articulate the basic values	**1** - People at all levels demonstrate a shared belief in the value of small step incremental improvement, in which everyone can actively participate and contribute
	2 - When something goes wrong the natural reaction of people at all levels is to look for reasons why, rather than blame other
	3 - People (individuals & groups) make use of a problem finding and solving improvement cycles
B **Getting the CI habit** The ability to generate sustained involvement in CI	**1** - People use appropriate tools and techniques to support CI
	2 - People use measurement to shape the improvement process
	3 - People participate in, initiate and carry through CI activities
	4 - Closing the loop – ideas are responded to in a clearly defined and timely fashion
C **Focused CI** The ability to link CI activities to the strategic goals of the company	**1** - The organisational strategic goals & objectives are used to focus & prioritise improvements. Company, departmental & CI objectives are aligned & understood
	2 - Proposed improvements are assessed against departmental & company objectives to ensure consistency & alignment – prior to implementation
	3 - Individuals and groups monitor/measure the results of improvement activity & the review the impact upon strategic and departmental objectives
	4 - CI activities are an integral part of the individual or groups work, not a parallel activity
D **Leading the way** The ability to lead, direct and support the creation and sustaining of CI behaviour	**1** - Managers support the CI process through allocation of time, money, space and other resources
	2 - Managers recognise in formal (but not necessarily financial) ways the contribution of employees to CI
	3 - Managers lead by example, becoming actively involved in design and implementation of CI
	4 - Managers support experimentation by not punishing mistakes but by encouraging learning from them
E **Aligning CI** The ability to create consistency between CI values, behaviour & the organisational context	**1** - Ongoing assessment ensures that the organisations structure & infrastructure & the CI system consistently support & reinforce each other
	2 - The individual / group responsible for designing the CI system design it within the current structure and infrastructure
	3 - Individuals with responsibility for particular company processes/systems hold ongoing reviews to assess whether they and the CI system remain compatible
	4 - Those responsible for the CI system ensure that when a major org change is planned its potential impact on the CI system is assessed and adjustments made
F **Shared problem-solving** The ability to move CI activity across CI boundaries	**1** - People cooperate across internal divisions & functional group in CI as well as working in local areas
	2 - People understand and share a holistic view (process understanding & ownership)
	3 - People are orientated towards internal and external customers in their CI activity
	4- Specific CI projects with outside agencies – customer, suppliers etc, are taking place
	5 - Relevant CI activities involve representatives from different organisational levels
G **Continuous improvement of continuous improvement** The ability to strategically manage the development of CI	**1** - The CI system is continually monitored and developed; a designated individual or group monitors the CI system and measures the incidence (frequency and location) of CI activity, and associated result
	2 - There is a cyclical planning process whereby 9a) the CI system is regularly reviewed and, if necessary, amended (single loop learning)
	3 - There is periodic review of the CI system in relation to the organisation as a whole - may lead to a major regeneration (double-loop learning)
	4 - Senior management make available sufficient resources (time, money, space, personnel) to support the ongoing development of the CI system.
H **The learning organisation** Generating the ability to enable learning to take place and be captured at all levels	**1** - People learn from their experiences, both positive and negative
	2 - Individuals seek out opportunities for learning & personal development
	3 - Individuals & groups all levels share (make available)their learning form all work experiences
	4 - The organisation articulates & consolidates (captures & shares) the learning of individuals and groups
	5 - Managers accept and, where necessary, act on all the learning that takes place
	6 - People & teams ensure that their learning is captured, making use of the appropriate mechanisms
	7 - Designated individuals use mechanisms to deploy the learning that is captures across the organisation

Source: Adapted from Bessant et al. 2001

Whilst this model provides a powerful outline for evaluating CI maturity (Bhuiyan & Baghel, 2006) Attadia & Martins (cited in Oprime et al., 2011) argue that the levels need greater clarity; not only serving to identify the extent of CI maturity, but also to guide organisations in defining strategies to improve their abilities to reach higher levels of maturity.

Joergenson et al. (2003) and McLean & Antony (2014) contend that problems with maintaining and sustaining CI over time are not uncommon, so despite the successes of many CI initiatives, the majority within the US and Europe die off within a few years. They go on to identify the need for strategies for revitalising CI systems that have faltered and suggest utilising the CISAT (Continuous Improvement Self Assessment Tool), a modification of CIRCA (1999), and depicting the degree to which CI behaviours (based upon Bessant & Caffyn, 1997) are evident.

Joergenson et al. (2003) highlight the increasing use of self assessment tools, yet challenge the relative linearity of the maturity model suggested by Bessant & Caffyn (1997), as CI maturation was found in reality to follow a much more random and non-linear pattern. Joergenson et al. (2006), argue that, just as some capabilities may be more vital than others, some may actually be prerequisites for the development of others. Thus, the loss of a seemingly minor capability could result in a step-down the maturity ladder, even where a more important capability or behaviour was present. Hence, they conclude that *'CI development need not – and perhaps should not – progress in a linear fashion'* (p.8), suggesting that the development of process theory remains at an early stage, warranting considerable further empirical research.

The significance of CSFs has been explored by Fryer et al. (2013) in the development of an adapted CI Maturity framework derived from Bessant et al. (2001). The framework offers eight model categories (abilities) and three levels of maturity; (1) 'Going through the motions', where no real change to attitudes or organisational culture is evident; (2) 'Transforming' where there is evidence of CI, but systems are still bedding down; and Embedding (3) where CI has become the norm. The extent to which the work creates *'a more intuitive framework to understand and test CI maturity'* (Fryer, et al. 2013. p.493) requires further research.

Case Narrative

Case Introduction

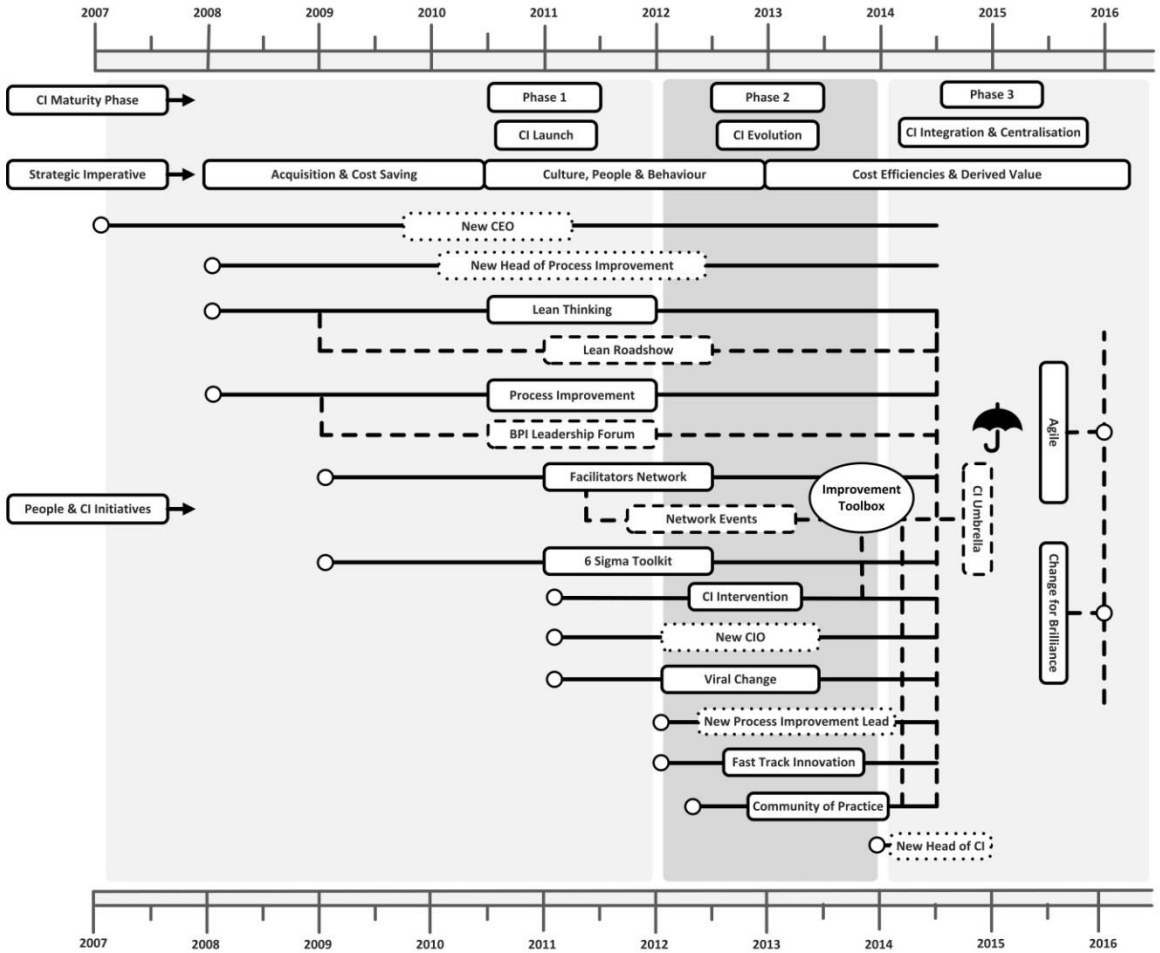
The case organisation is a leading UK-based financial services provider, which has been in operation for over 150 years, and has a current workforce in excess of 5000. Such organisations can struggle to implement comprehensive change due to their large size (Pascale et al. 1997) and level of maturity (Womack and Jones, 1996), and traditional structure, yet since 2007, with the appointment of a new CEO serving as the catalyst, the organisation has transitioned though a period of transformation. Losing in the region of £70M per annum in 2006, the new CEO was tasked with orchestrating a company turnaround, initially utilising tactical short term fixes, replacing the entire management team, and investing in new skills and talent in human resource and management strength through company acquisition. Gijo's (2011) suggestion that trained people are desirable was here proved with the poaching of new minds, holding extensive experience in the field of Operational improvement. The influx of new minds introduced a fresh way of thinking, aiming to build local capability, deliver heightened improvement activity and enhance overall performance. Over the last 8 years the company has transitioned through a challenging period of change; strategic imperative, size, structure, leadership, market conditions and regulation, all serving as obstacle and opportunity. In 2010/11 the senior management showed their commitment (Powell, 1995) in people, by refocusing strategic imperative attention from cost-saving to consider the cultural and behavioural dimensions.

The organisation returned to profitability in 2012, with the top management team moving mind-set from short term tactical improvement to long term strategy, of which Continuous Improvement was central. This paper explores the CI journey of two cases within the organisation, offering a narrative, CI timelines (Figures 4&5), and application to the Bessent et al. (2001) Maturely Model.

Case 1 – Phase 1

In 2008 in a newly created full-time role, the Head of Process Improvement was faced with the challenge of serving as an advocate for improvement and delivering urgent cost saving, tasked to devise, deploy and execute an Improvement and CI strategy. The strong personality (Moosa & Sajid, 2010) and infectious charismatic style served to build momentum, aid in employee engagement and buy-in. With waste reduction and process efficiency the lead began to implement new Improvement initiatives. Lean Thinking introduced and complimented by road show events designed to communicate the improvement vision, and training in process improvement tools were introduced alongside a leadership forum designed to drive collaborative behaviour. In 2009 a facilitator network was established to share stories of success and lessons learned and to train employees in an array of improvement methodologies, including a six sigma toolkit.

Figure 4: CI Timeline – Case 1



Source: Author

The initial level of waste encountered offered an opportunity to deliver the cost efficiencies demanded. In utilising the toolbox, one process that had failed customers and generated a high number of complaints was reduced in cycle time from 37 to 11 days, eradicating a plethora of unnecessary movement, duplication and additional non value adding activity. This was achieved through an initial big leap and followed by a series of incremental refinements.

Since launching the CI system the team had been focused on cost saving efficiencies, and in 2010/11 it was refined to embrace and integrate people, process and technology, and in doing so align itself with the evolving company strategy. The aims were to evolve and introduce a new way of working; build employee understanding in what underpins value through the customer lens; and train and empower employees establishing a new, shared vocabulary of waste, so to better recognise the opportunity to improve current process.

A CI intervention team of 3 was introduced, and with a limited budget they focused on facilitating a series of action workshops, with the mantra of 'teaching a man to fish' adding to skill sets that could be utilised through CI activity and everyday role responsibilities. Intervention and support in problem solving was available and training was offered to increase the improvement toolbox in a broad selection of skills and methods that were previously utilised, and therefore increasing the probability of the right tool being used for the job. This development drove a cultural shift where actual activities and actions were now owned by the empowered teams based on the shop floor, able to make the decisions and implement change. The transition though was not without challenge, pockets of employees initially acting as rabbits in headlights, not used to being given the opportunity to make decisions and solve problems; time was required to trust in the new system, reduce cynicism, and build true levels of buy-in.

Not encouraging employees at lower levels to participate (Pinedo-Cuenca, Olalla, & Setijono, 2012) can serve as an obstacle to CI; so in an effort to encourage a culture of innovation at all levels, the CI team employed a new full time member to meet a growth in intervention demand and establish a Viral Change network. Within two years a network of viral change champions, encouraging people to come up with ideas, take ownership of, and drive those ideas themselves had been established. Moving away from the old mechanistic structure and towards the principle of an organism, spread through an infection of ideas between supported

teams and networks and peer to peer communication channels. Less about advocacy and change experts and more about activism and backstage leadership, an opportunity to make a real difference whilst instilling a sense of fun, this resulting in an increase in departmental collaboration, trust, openness and support.

There was though a presence of cynicism and resistance from individuals not interested (Moosa & Sajid, 2010) in the CI mechanisms being established. Some middle managers feared overburden and disruption of team members (Bhasin, 2013) away from their everyday roles, and so restricting and in some cases blocking the opportunity to work on outside CI projects. Questionable Project selection (Gijo, 2011) only served to fuel cynicism, disrupting the balance between top management's effort to empower employees and buy in by supporting in the eyes of at least some unworthy projects. Levels of reward and recognition of projects and activities of worth were seen as low, and did not hold significant weight within the internal appraisal system (Hariharan, 2006), this risking a stalling of momentum. Whilst challenges were evident, credibility grew through 2011, with increased self-sufficiency, traction and momentum of CI activity; built upon the mantra to Educate, Deliver and Communicate.

Case 1 - Phase 2

In 2012 a fast-track innovation programme was established and a new process improvement lead, specialising in creative problem solving, was appointed within the team, who quickly launched a community of practice. An array of different training sessions was presented by individuals both internal and external to the organisation, including SERVQUAL, KETSO, and the Customer Journey in order to heighten participation and inclusivity. In 2013 systems thinking was introduced and an extended use of customer journey mapping. The facilitator network saw an increase in membership, moving across the boundaries of the department, and became a face-to-face forum. The CI mantra evolved to Educate, Collaborate and Communicate.

Two key obstacles had developed. Firstly, whilst senior management were visible in their support of CI, pockets of middle managers on the shop floor continued to prove less inclined to offer their sponsorship. Unless middle managers get involved, transformation efforts are likely to stall (Homeno & Ingvaldsen, 2015) and ignoring the importance of

middle managers as initiators and champions of CI was proving detrimental to the system. In an effort to gain extended buy in, the team implemented a plan to increase the level of communication, transparency and feedback loops of CI initiative results; performance measurement of CI activity a weakness in the system.

Whilst top management where initially happy to allow the CI system to evolve, adopting a long term strategy, without holding unrealistic expectations (Zbaracki, 1998, Mariotti, 2005), urgency in attributing value had become evident. This challenge magnified by the tightening of market conditions constrained budgets, reverting back to strategic imperatives focused on cost efficiencies and derived value. The Initial failure to establish and embed the necessary mechanisms to monitor performance and attribute benefit (Gijo, 2011; Keim, 2011) had already been felt, now attributing value from the overall CI system, and aligning deliverables with departmental and strategic intent proved a significant challenge. It had proved very difficult to directly attach CI activity to tangible bottom line results; the solution was to link the system with the evolving attitudinal and behavioural factors in the way the department worked, and so inexplicably linked with its performance.

Case 1 - Phase 3

With the responsibilities of the original Improvement lead continuing to cross departmental boundaries, and a departmental restructure in early 2014, a new head of CI was appointed. Working within more restrictive boundaries, and challenged to decipher value in CI activity, they sought to converge CI activities under a single integrative CI umbrella (Figure 2 - Period 3). The plethora of initiatives had caused a fog of confusion for those within the department, who were uncertain which initiative, technique or facilitation group was most suitable to help them achieve their particular goal. This sense of initiative overload (Abrahamson, 2000) had driven a level of uncertainty, and increased the risk of employees struggling to see how the initiates fitted together (Mclean et al. 2015). Whilst a level uncertainty had arisen, each CI initiative had been allowed to mature through its own lifecycle.

The loss of the original improvement lead was sorely felt by the CI team, and change fatigue set in following a further restructure of the department in early 2015. New senior leadership, whilst appreciating the cultural benefits of CI, made the decision to reduce the size of the team to two, and further questioned the tangible value of CI initiatives. Thus two

challenges were set: (1) to attribute value to CI, and (2) to make it sustainable. Soon after, with the strategic imperative returning to cost efficiencies and derived value, department leadership made the call to dissolve the CI team, feeling that it was the right time to move away from a departmental taskforce mentality and to build upon the CI mind-set that has been established, and focus on the centralised initiatives.

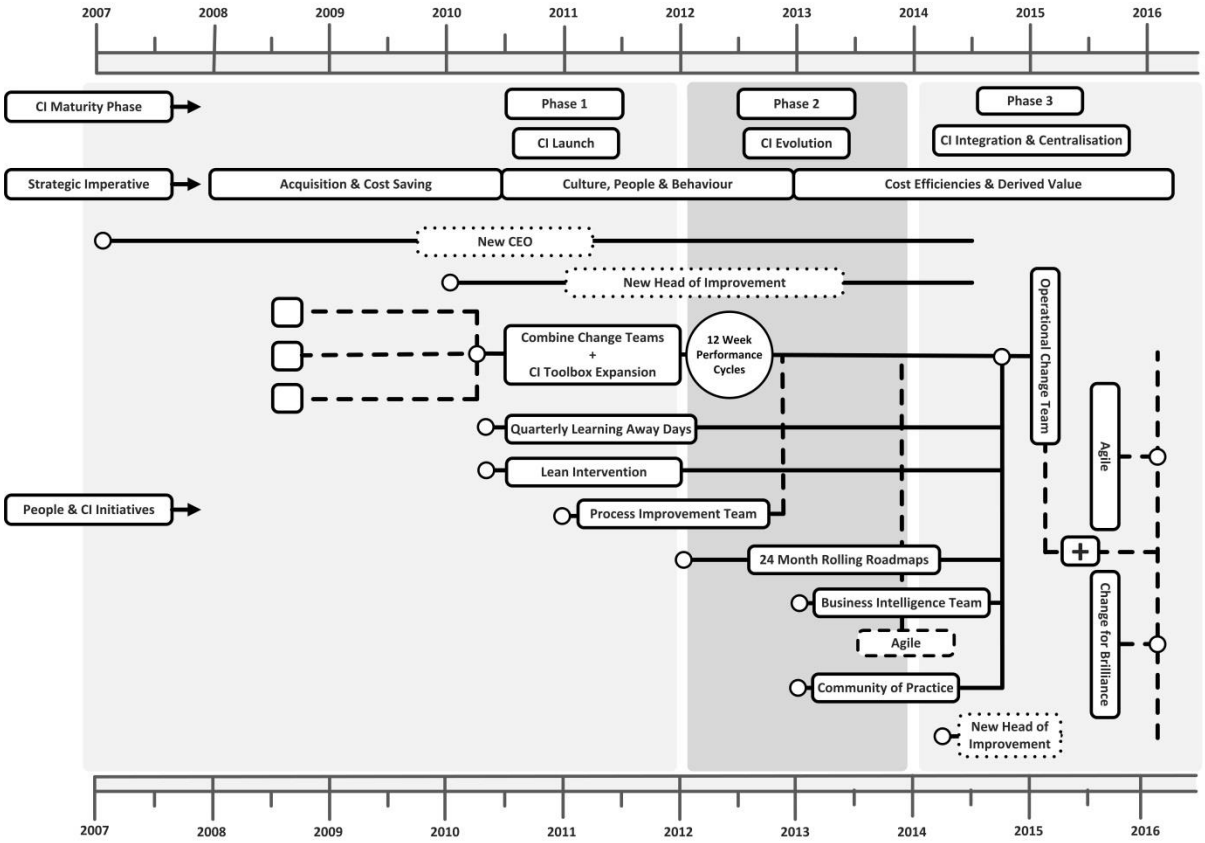
Case 2 – Phase 1

CI was first established with the advent of a new departmental Head of Improvement in 2010. It was quickly observed that there was a lack in urgency regarding improvement activity, evidence of disorganised quality cells, Improvement efforts were predominantly project-driven and ad hoc in nature, and so the decision was made to drive a cultural shift towards CI.

With over 3700 staff in the department, the new improvement system aimed to build upon the existing quality management system, replace existing noise with an element of calm and control, solving problems with a sense of priority and siphoning ideas through the CI system. The challenge was to deliver a return on investment of £10 million savings p.a. over five years.

An initial step was to combine separate change teams and establish a shared vision for improvement, synthesising knowledge and experience and to broaden the improvement toolbox of methodologies used through project interventions; initially comprising of process mapping, SIPOC, Five Why analysis, 5S and seven waste evaluations. A lack of education and training can serve as a major barrier to CI success (Bhasin, 2013), the programme established skills and competence in CI tools through intensive lean, improvement awareness, and three day PDCA workshops. In order to embed performance measurement, 12 week process and performance cycles were installed, the objective was to ensure intervention activity was analysed through to their root cause and impact recorded, and shared. CI intervention teams aimed to collaborate with shop floor employees, and together, design and implement sustainable improvements; a mantra of test and learn, fix and move. Quarterly learning away-day sessions were introduced for all members of the change/improvement teams. This served to share lessons learned and spread confidence in the utilisation of new tools, steering away from frustration that can develop when there is a lag between training and results (Snee, 2010).

Figure 5: CI Timeline – Case 2



Source: Author

In 2011 a process management team was established to work in conjunction with the change and improvement team. It had been identified that process changes were being rushed before they were fully understood. Thus, a change in behaviour was necessary to review the rationale and potential customer benefit of improvement activity and ensure feasibility. By 2012 savings of approximately £6 million had been achieved, together with an increase in CI traction. Training in performance management was introduced to further align CI and departmental strategy. Increased engagement levels with middle management were evidenced alongside a growth in the participation and involvement of frontline staff, thus facilitating the further capitalisation of tacit knowledge within the department. One such collaboration led to a more efficient customer journey, an increase in workforce capacity and a reduction in backlog from over 11,000 to 6,200 active claims.

Three key challenges remained. Firstly, senior management called for the pace of change to be increased. Secondly, the vortices and fractures evident between individuals and

groups and associated political behaviour continued to serve as obstacles to progression, and thirdly, the debate surrounding the sufficiency of time and space available for training.

Case 2 – Phase 2

In 2102, 24 month rolling roadmaps were introduced; each member of the team was challenged to acquire and share their leaning of an existing or new tool or skill. The Head of Improvement seeking to embed a philosophy of 'I am because we are', allowing time for capability to mature in the CI tools introduced in Phase 1, and their utilisation to become the norm.

In 2013 the Balanced Scorecard, and TAKT time were introduced and the improvement team crossed departmental boundaries by engaged within the community of practice established by case 1. A business intelligence team was recruited, and soon crossed outside organisational boundaries, with suppliers designing and implementing a new system under the AGILE initiative, in order to bring greater efficiency to the customer journey and reducing the cost of managing claims. The impact of which was amplified by opening the system up to a wider category of claim. By the end of the year approximate savings across the department equated to a further £12.6 million, in alignment with strategic goals.

Case 2 – Phase 3

By 2014 KPI's had been broken down horizontally and vertically, new behaviours of collaboration and shared decision making were becoming the cultural norm. An increase in middle management support was observed, resulting in a further push of frontline staff engaging with CI tools, and thus becoming self-sufficient in taking ownership when refining activities.

Mid-2014 saw CI mature to a level of devolvement, with all projects being tendered under the CI banner, continued coaching and ongoing support to reinforce CI behaviour, and more meaningful performance management through scorecards and dashboards. Reward and recognition systems for the first time being linked to performance measurement and bonus schemes. Improvement activity drew a further £20 million in savings by the end of the year.

Shortly thereafter a sudden and unexpected change in leadership of the improvement team resulted in a slowing of momentum within the CI system and a move from PDCA to DMAIC as the central improvement cycle. After only eight months' tenure the new head departed, and the department began a period of restructuring without a Head of Improvement. Despite the gap in leadership causing disruption, a significant proportion of the improvement team continued to use the knowledge, capabilities and the established tools; evidencing a CI mindset.

In 2015, through the period of restructure, all teams were merged under the title of 'Operational Change' with a clear purpose of delivering enhanced departmental collaboration, seamless improvement intervention and CI activity. The challenge remains of how to most effectively capitalise upon potential synergies of the teams without a leading figure. Board level management has challenged the department to do more with less, and continue to deliver change faster. CI activity is to cross boundaries, buying into the newly centralised initiatives.

CI Centralisation

Phase 3 in each case saw a shift to utilise Centralised CI initiatives, these designed to cross departmental boundaries and build upon the emergent CI DNA (Figure 3 & 4). Two key initiatives exist, firstly 'Agile', an extension of Case 2 initiative, and a new 'Change for Brilliance', building upon Case 1's Communities of Practice.

The Agile system established a platform that delivered greater clarity and visibility; drawing together internal and external stakeholders within a single space. Whilst initially facing resistance and cultural disruption, individuals and groups across the organisation looked up and said 'that's how to do it, how can we utilise the system to increase speed, reduce cost, and improve quality of delivery'. Those who had previously kicked against the concept, and other CI initiatives, were now requesting advice on how to adopt the system, signing up to a more collaborative way of working. Agile had not only proved to be a methodology that could fit and facilitate improvement in the way the team worked, but also changed culture and behaviour. After a significant training effort, new knowledge, capabilities and learning had been shared across organisational boundaries, leading to greater

engagement and an expansion in collaboration. Success has been recognised through the introduction of a 5% time allocation for employees to engage with the initiative and drive CI.

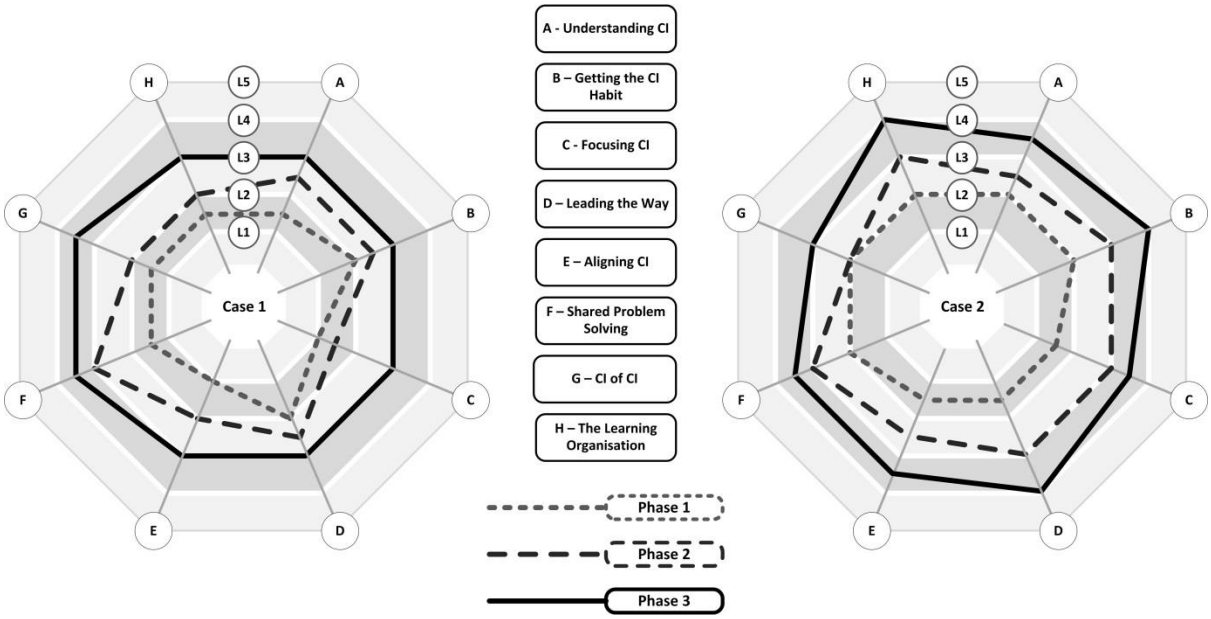
The 'Change for Brilliance' programme was established to create vertical communities with horizontal participation, through which individuals can share successes and failures, and learn and collaborate across internal and external boundaries. With the support and sponsorship at Board level, individuals and groups have been offered allotted time to work together on an improvement piece that is then fed back into their community. The objectives being to drive cultural and behavioural change, enable business transformation, and further align CI and strategic goals. Support for the initiative will continue subject to the proviso that value can be established, tracked and reported; the challenge will be in the transition between building new knowledge and the ability and/or opportunity to implement it.

Discussion

The CI Maturity Vectors presented (Figure 6) facilitate a direct comparison of achievement between the two cases, plotting levels of CI abilities and behaviours evident in each phase of the study (see Appendix 1), mapped across the 5 Maturity levels within Bessant et al.'s (2001) model.

The model allows for the evolution of the CI system to be visualised and value attributed; for areas of progression, weakness and stagnation to be recognised; identifying potential opportunities for improvement; and, providing guidance where resources could be better utilised in order to drive the maturity of the CI system. In reviewing the vectors, it should be noted that while apparent periods of "scoring stagnation" may be evident, this should not necessarily be interpreted as an absence of behavioural change, but only that this was insufficient to warrant a change in the ability score awarded. What is important to success of the programme is not falling back to a lower level, so pausing to reinforce the current level, rather than rushing to achieve the next should be viewed as positive activity.

Figure 6: CI Maturity Vectors – Cases 1 & 2



Source: Author

Case 1

The direction and support of senior management effectively 'Led the Way', spearheading the launch of the CI system in Phase 1, however the differential levels of buy-in across middle management resulted in only pockets of support, staff release and participation. The resultant score of 2 represents an intuitive weighting, acknowledging the importance of top management support in driving forward the creation of CI behaviours. Notwithstanding challenges in achieving requisite middle management support in some areas, there is evidence of 'the CI Habit' becoming ingrained amongst employees (at Level 2), with buy-in occurring through education, offering the opportunity to learn new skills, and the introduction and training in new tools. At the same time, improvements clearly required in the capture and transparency of performance measurements and sharing of results (B2).

Phase 2 saw a drive towards 'Shared Problem-Solving' (L1.5 to L3) with strong participation and an increased number buying into CI system, utilising tools and increasing measurement of results. Collaborative behaviour grew across CI boundaries, with further requests for intervention and evidence of shared decision-making in seeking performance gains. However, whilst there is evidence of a shift in mindset towards becoming a 'Learning Organisation' (to L2), with employees seeking opportunities for learning and improvement,

further progression along the scale is dependent on increasing participation levels across the case.

The pace and extent of 'Focused CI' grew significantly in Phase 3 (to L3) due, in part to the crossing of departmental boundaries and resultant ties to strategic and departmental objectives. This alignment is further reflected in 'CI of CI' (to L3.5), representing a fundamental shift in systems where, having established a CI mindset, the CI team was dissolved and subsequently recreated through the centralised system. The strategic imperative, together with enhanced leadership direction and support (to L4), has resulted in the balanced evolution of 'CI Alignment' from L1, L2 and L3 through the integration of existing structures and the evolving CI system at each phase of the study. Less radical shifts were identified in 'Shared Problem-Solving' where, despite significant progress to L3.5, a move to L4 would require wider participation and increased devolution and autonomy.

Case 2

Prior to Phase 1, CI maturity levels were assessed at L1 across the board, however by the end of this phase, there was clear evidence of progression across all abilities, with 'Understanding CI', 'the CI Habit' and 'Shared Problem-Solving' achieving L2. Noticeable improvements were seen in performance and levels of engagement with the introduction, training, and adoption of collaborative CI initiatives, resulting in evidence of waste reduction and more customer-centric processes.

During Phase 2, the vector shows a significant shift in 'Focused CI' and 'Leading the Way' (from L1.5 to L3), with the CI way of working being supported by middle and senior management, and evidenced through a conscious effort to align local/departmental goals with wider, organisational strategic objectives. Whilst the tools introduced during Phase 1 were given time to embed, new complementary alternatives were introduced; the emerging toolkit becoming the norm. From the system grew a higher level of collaboration and 'Shared Problem-Solving' (to L3) across the organisation and with suppliers, ensuring performance measurement, attributing value and tracking progress. Whilst before Launch to challenge the status quo would have been frowned upon, it had now become encouraged through increased autonomy and devolution.

The vectors show continued growth in all areas in Phase 3. The CI tools continued to mature, capitalising on resultant synergies of enhanced customer-centric processes, and effectively supporting the development of the 'CI Habit' to L4. Collaboration within the CI system became increasingly evident with 'Shared Problem-Solving' continuing to evolve across departmental and organisational boundaries (to L4). This extended collaboration, and resultant transparency, added impetus to the drive towards becoming a 'Learning Organisation' (to L4), through the facilitation and capture of learning at all levels.

Model Reflection and Conclusions

The CI Maturity Model provided an effective framework against which to measure the pace and trajectory of CI evolution, and the extent of CI maturity achieved by the end of the study. As each CI system evolved, the journeys taken were unique, launching from different start points, moving forward in different areas, at different speeds and at different times; towards a common goal. Notwithstanding these differences, common themes and issues may be derived through the analysis of the two cases.

In scoring behaviours and abilities, weightings were at times intuitive and interpretive. In some instances, challenges were experienced in measuring achievement within the same section and phase. For example in Case 1, Phase 3, 'Leading the Way' it was difficult to attribute a true value to the constituent behaviours as despite the pockets of CI support, lead with passion from the top, cynicism remained evident in parts of the organisation.

In seeking to measure progression through the Maturity Levels, it became evident that whilst ascension between L1 and L2 can occur quite quickly, progression to L3 and beyond inevitably requires time for new CI behaviours to embed and the use of new tools to 'become the norm'. At the same time, progression between levels can stall where not all constituent behaviours are evident. It was also recognised that progression beyond L3 in all behaviours presented significant challenges within such a large and well-established organisation, due to the difficulties identified in achieving engagement and participation at all levels.

Common in both cases have been the CSF's of CI leadership and Board level sponsorship in providing direction, resources and support for the CI initiative. The

Improvement Heads had a clear role in driving the CI system, in the initiatives and tools introduced, establishing and embedding the mantra, and in ensuring performance is tracked. However, there were clear difficulties in engaging all middle managers in the improvement process, resulting in pockets of buy-in and an evident lack of commitment and support in some areas. It was also identified that as CI became increasingly devolved, and teams more autonomous/self-sufficient, the need for, and nature of managerial participation in the process changed, although the requirement for visionary leadership remained throughout.

Throughout the study, the CI systems have had to adapt to the strategic needs of the wider organisation, changes in leadership and the reallocation of resources ordained at Board level. Presently, improvement teams are under increased pressure to attribute and report clear value from CI activity, and the establishment and achievement of financial goals/targets in Case 2 provided a tangible basis against which improvements could be measured, supported by the intangible organic synergies between their improvement taskforce and the development of a CI mindset. Current work is establishing a clearer path for CI progression and the attribution of CI value along departmental and strategic lines, however, the future challenge lies in effectively 'unlocking the black box of CI', determining effective strategies for identifying, measuring and consolidating the intangibles and tangibles of CI activities and behaviours.

In considering the failure of both cases to progress beyond L4 Proactive CI over the period of the study, the highly regulated nature of the financial services sector was seen to be a potential barrier to achievement of Full CI Capability, where autonomy and experimentation are constrained by the necessity for risk avoidance through highly standardised systems and processes, effectively resulting in potentially fewer opportunities for CI in some areas.

Final Thoughts

CI evolution is in reality multifaceted; progression is not a singular linear process, but rather one with that can progress and retract fluidly, dependent upon a multitude of variables. Neither is it a binary concept, with clear evidence of simultaneous hot and cold pockets of buy-in, participation and activity. Within this context, the application of the Maturity model demonstrates how CI activity can be effectively measured across multiple abilities. Though

this study, the model has demonstrated its potential, not only as an audit tool capable of assessing ‘where are we now’, but also identifying what steps need to be put into place in order to progress to true CI. The action of formally attempting to measure the CI Maturity level draws management focus towards the activities and behaviours that are delivering CI and thus reinforced the need to further develop them as an integral part of the organisation’s operational culture.

This case study indicates that the areas of Merging ‘Understanding CI’ with ‘Getting the CI Habit’, and also Merging ‘Focused CI’ with ‘Aligning CI’ may be pivotal in fully embedding CI, so deeper analysis of these will be undertaken in forthcoming stages of this research. Of particular interest, with a view to adding value to organisations intent on pursuing CI, will be identification of detailed success factors, barriers and characteristic indicators to aid in monitoring progress. It is hoped that this will allow the development of a new model linking participation and inclusivity to the organisation’s CI maturity development.

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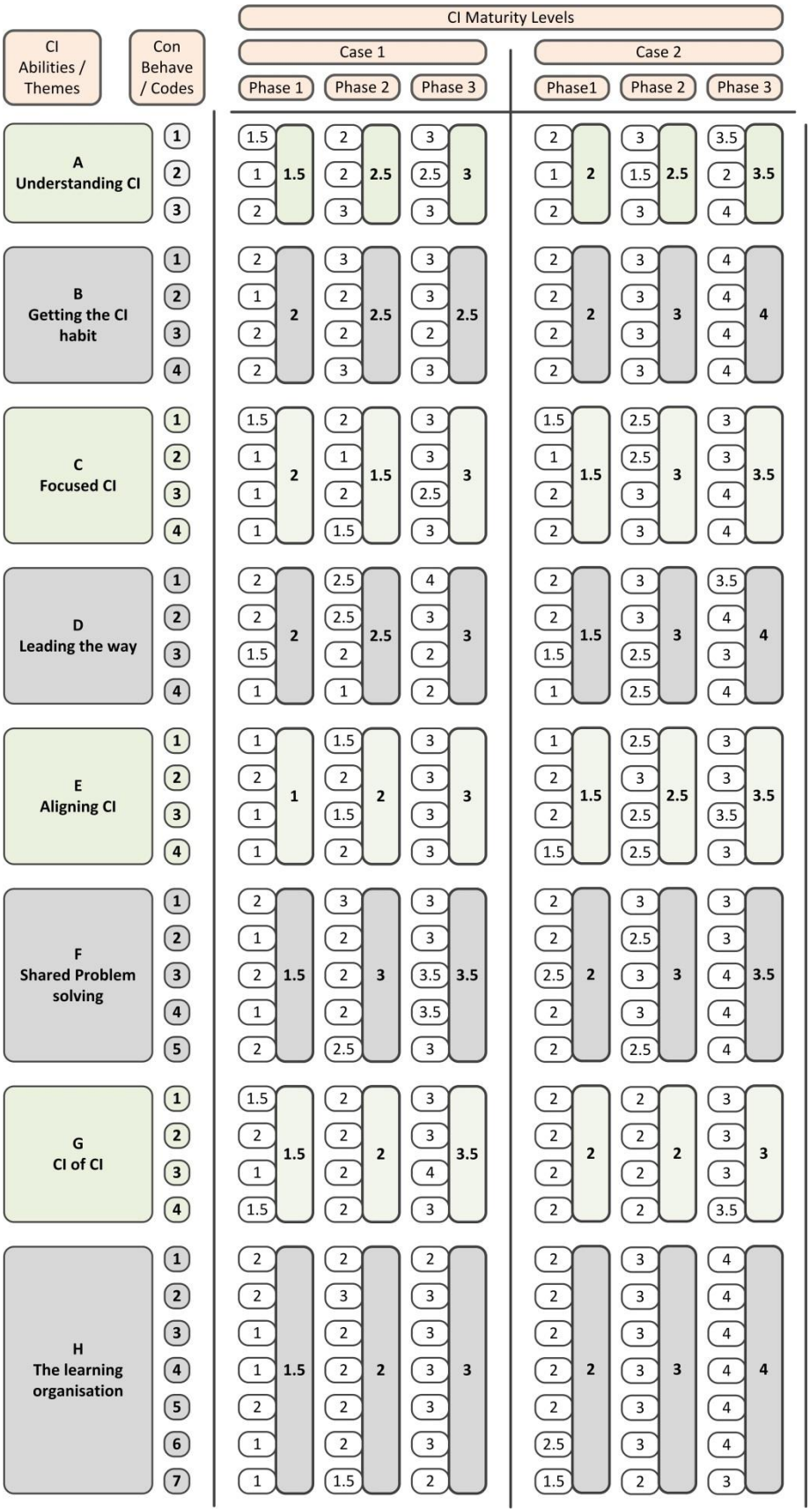
Appendix 1 – Case Data Scoring



Source: Author